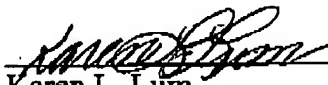


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Applicants:	Ernest C. Chen)	I hereby certify that this
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U.S. Serial No.:	10/669,211)	transmitted to the United States
)	Patent & Trademark Office,
Filed:	September 23, 2003)	
)	Fax No. (571) 273-8300
Title:	SAMPLE GENERATION)	
	METHOD AND SYSTEM)	on this date:
	FOR DIGITAL)	
	SIMULATION)	Dated: November 1, 2007
	PROCESSES)	
)	
Art Unit:	2193)	
)	Karen L. Lum
Examiner:	Ngo, Chuong D.)	

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

The Applicants request review of the final rejection in the above-identified application.

No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheets. No more than five (5) pages are provided.

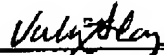
Serial No. 10/669,211

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I am the attorney or agent of record.

Respectfully submitted,



Victor G. Cooper, Registration No. 39,641
Attorney for Applicant(s)

Date: November 1, 2007

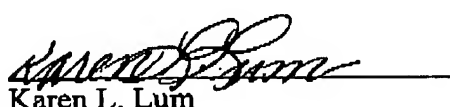
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Examiner:	Ngo, Chuong D.)	

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Alexandria, VA 22313-1450

PRE-APPEAL BRIEF

The Advisory Action dated October 19, 2007, has been carefully reviewed. A Notice of Appeal is being filed herewith. Claims 1-20 remain in the application. The pre-appeal brief is being filed in an attempt to clarify an error the Appellant believes is being made by the Examiner in his understanding of the claim language and interpretation of the specification, namely Figures 4A and 4B.

In the Advisory Action, the Examiner maintained the rejection of claims 1-10, 12 and 17-20 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The Examiner asserted that the claims contain subject matter that was not described in the specification, namely that the specification does not disclose that the mapped samples are uniformly spaced. It is respectfully asserted that the specification supports the claims in at least the following places:

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[0012] Figure 1 is a graph schematically illustrating the **mapping of uniform random numbers** to generate a given cumulative density function in accordance with a preferred embodiment of the present invention.

[0019] The set of random numbers is preferably generated such that they have a uniform distribution between 0 and 1. Equivalently, instead of a uniform distribution between 0 and 1, random percentages may be generated to have a uniform distribution between 0% and 100%.

[0020] Alternatively, instead of generating random uniform samples for {R}, R can be replaced with an evenly spaced set of values {Y}.

[0021] In other words, a value in the random set source set {R} is selected and **mapped or looked-up** on the CDF curve/table to determine the corresponding value. This process is repeated with each member of {R} to get a set of numbers with the specified CDF.

[0024] The first and second components of the invention may be combined as follows. First, {R} is generated by **uniform stepping** between 1 and 0 in descending order. The {X} values are then generated in ascending order with **table lookup**.

The Examiner further asserted that Figures 4A and 4B show the mapped samples are nonuniformly spaced. It is respectfully asserted that the Examiner is misinterpreting the Figures. The Figures are a distribution of the number of samples, not the samples themselves. Due to companding the concentration of uniformly spaced samples will vary within a range. It is respectfully asserted that the concentration of the number, or quantity, of samples has nothing to do with the uniformity of their spacing. The Figures referenced by the Examiner are not directed to the uniformity of spacing between samples. It is respectfully asserted that the samples are uniformly spaced as taught throughout the specification. Figures 4A and 4B are directed to the distribution of the number of samples, or the concentration of samples, in a given probability area and do not represent the uniformity of the spacing of the samples asserted by the Examiner.

According to the specification, uniformly spaced samples are mapped into set {X} which implies that samples in set {X} will also be uniformly distributed. The set {X} is then scrambled. Therefore, it is respectfully asserted that uniformly spaced samples are scrambled as recited in the claim language and that the claim language is supported by the specification.

The Examiner also maintained the assertion that the limitation in claim 17 directed to "a third component for reducing said total number of samples needed to achieve a given statistical

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accuracy" is not supported in the specification and that the specification does not disclose the companding function is for reducing the total number of samples as recited in claim 17. Again, Applicants respectfully disagree. Applicants maintain that companding as disclosed in the specification is used to reduce the total number of samples in the set of random numbers. In addition to the sections of the specification pointed out to the Examiner in the response filed September 7, 2007, Applicants respectfully direct the Examiner to the language of paragraph [0010] which also describes the step of companding to provide a sufficient representation of a low-probability area while **decreasing the total number of samples** within a given probability area.

It is respectfully asserted that the claim language conforms to the specification. Further, paragraph [0025] describes how the companding component **reduces** the number of samples in an area where a much larger number of experimental samples than required are normally generated, such as a high probability section.. It is respectfully requested the Examiner withdraw the rejection of claims 17-20.

The Examiner rejected claims 1-20 under 35 U.S.C. § 112, second paragraph. The Examiner asserted that "scrambling said set of uniformly spaced samples" as found in claims 1 and 12, appears misdescriptive as not being supported by the specification. It is respectfully asserted that the independent claims were amended in the amendment after final in an attempt to overcome this rejection and more clearly define the random number generation of uniformly spaced mapped samples as indicated by the Examiner.

It is respectfully requested the Examiner withdraw the rejection of claims 1-20 under 35 U.S.C. § 112.

The Examiner maintained the rejection of claims 1-20 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicant respectfully requests the Examiner indicate to some degree what he is looking for in order to overcome the non-statutory subject matter. Again, Applicant is looking to section 2106 of the MPEP which requires that, whenever practicable, the Examiner should indicate how rejections may be overcome and how problems may be resolved in order to support this request. It is respectfully requested that, should the Examiner remain unconvinced by the amendments herein, that he provide an indication of how the rejections may be overcome to resolve the problem.

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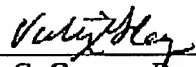
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CONCLUSION

It is respectfully requested the rejections under 35 U.S.C. §112 and §101 be withdrawn and that a Notice of Allowance be issued for claims 1-20.

Should any fees be associated with this submission, the Commissioner is authorized to charge Deposit Account 50-0383 of The DIRECTV Group, Inc.

Respectfully submitted,



Victor G. Cooper, Registration No. 39,641
Attorney for Applicant(s)

Date: November 1, 2007

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